REMARKS

Claims 13-31 are pending in the application.

Claims 13, 20, 22 and 23 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The phrase "the or each message (Ni)" has been changed to --each message (Ni)-- to distinctly claim the subject matter regarded as the invention. Withdrawal of the rejection is respectfully requested.

Reconsideration of the rejection of 13-15 and 20-23 under 35 U.S.C. 102(e) as being anticipated by US 6,842,808 to Weigl et al is respectfully requested.

Claims 13 and 20 are directed to a cycle-based communication system (1) and method for transmitting useful data (DATA) between users (3) of the system (1), including a data bus (2) and the users (3) connected to it, in which the data transmission is effected within cyclically repeating timeframes (4) with at least two timeslots (5) each, and each timeslot (5) is intended for transmitting one message (Ni), one message (Ni) contains at least some of the useful data (DATA), and each message (Ni) is assigned an identifier (ID), characterized in that the identifier (ID) is stored in each message (Ni) as part of the message (Ni); that each message (Ni) additionally includes data about the cycle; that the timeslots (5) have a fixed length; and *that at least one of the timeslots (5) of one timeframe (4) can be used, in various cycles, for offset transmission of different messages (Ni) that are not intended for transmission in every cycle.*

The examiner relies on Weigl et al for disclosing a method and a device for the exchange of data in messages, including a data bus and the users connected to it, and all of the limitations of claims 13-15 and 20-23.

Applicant disagrees with the examiner's interpretation of Weigl et al, as there are substantial differences between the disclosure of Weigl et al with respect to the present patent application. In particular, reference Weigl et al refers to the so-called TTCAN (time triggered controller area network)-data bus. In particular, the reference is directed to the synchronization of local clocks (UI to 1Z4) of the bus users (101 to 105) onto a global clock (gZ). In contrast thereto, *the principle idea of the present invention is to transmit messages from different bus users in the same timeslot of a data frame in different communication cycles.* This is neither disclosed nor rendered obvious by Weigl et al. Rather, in a TTCAN-bus in a timeslot (timing window) of a data frame (time interval) messages are transmitted always originated <u>from the same bus users</u>. In other words, the timeslots (timing windows) of a data frame (time interval) in TTCAN are not used for a chronologically shifted transmission of different messages, which are not transmitted in each transmission cycle, in different transmission cycles.

In contrast thereto, the present invention uses the same timeslots in the same data frames for the transmission of messages from different bus users in different communication cycles, or as recited in claim 13, **that at least one of the timeslots (5) of one timeframe (4) can be used, in various cycles, for offset transmission of different messages (Ni) that are not intended for transmission in every cycle.** By the method according to the invention, the

efficiency of the data bus can be significantly enhanced, because messages, which are not transmitted in each communication cycle, can be transmitted in the same timeslot of the same data frame in subsequent communication cycles. In other words, the present invention allows a kind of multiplexing in the timeslots of the data frames.

Weigl et al clearly shows, for example in column 5, lines 23 and 24 ("each timing window allows the exclusive transmission of a periodic message of variable length"), that each timeslot (timing window) is used for the transmission of an exclusive message of a certain bus user and that multiplexing in the timeslots is not possible.

Therefore, Weigl et al cannot anticipate the invention according to the recitations of current claims 13 to 15 and 20 to 23, which are distinguished over the prior art. Withdrawal of the rejection is respectfully requested.

Reconsideration of the rejection of claims 16-19 and 24-41 under 35 U.S.C. 103(a) as being obvious over Weigl et al in view of US Patent No. 6,606,670 BI to Stoneking et al is respectfully requested.

The examiner relies on Weigl et al for disclosing a method and a device for the exchange of data in messages, including a data bus and the users connected to it, and all of the limitations of claims 13-15 and 20-23, as applied above.

Weigl et al fails to teach that time data can be learned from the identifier that cycle data are stored in memory in a message as part of the identifier of that message. Stoneking et al is relied upon for disclosing that any convenient fields and message format

may be used depending on the particular implementation contemplated and for disclosing

that message identifier used together with other field for the purpose of message arbitration.
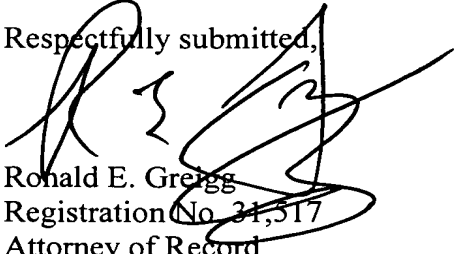
Even if Stoneking et al can be combined with Weigl et al to result in the combination

proposed by the examiner, the addition of Stoneking et al does not make up for the

shortcomings of Weigl et al with respect to the requirements of claims 13 and 20, that at least

one of the timeslots (5) of one timeframe (4) can be used, in various cycles, for offset

transmission of different messages (Ni) that are not intended for transmission in every cycle,

as discussed above.

Therefore, claims 16 to 19 and 24 to 31 are not rendered obvious by a combination of

Weigl et al and Stoneking et al, and withdrawal of the rejection is respectfully requested.

Allowance of the claims is respectfully requested.

The above amendments are being made to place the application in better condition

for examination.

Entry of the amendment is respectfully solicited.

Respectfully submitted,

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